

# Wisconsin Food Code FACT SHEET

## Retail Storage of Reduced Oxygen Packaged (ROP) Fish

The current Wisconsin Food Code addresses fish that is reduced oxygen packaged at the facility stating the fish must be frozen before, during and after packaging. However, the current Code does not address fish that comes into the facility already reduced oxygen packaged (ROP) or vacuum packaged by the processor. The following addresses how to store fish that arrive at a retail facility in reduced oxygen packaging.

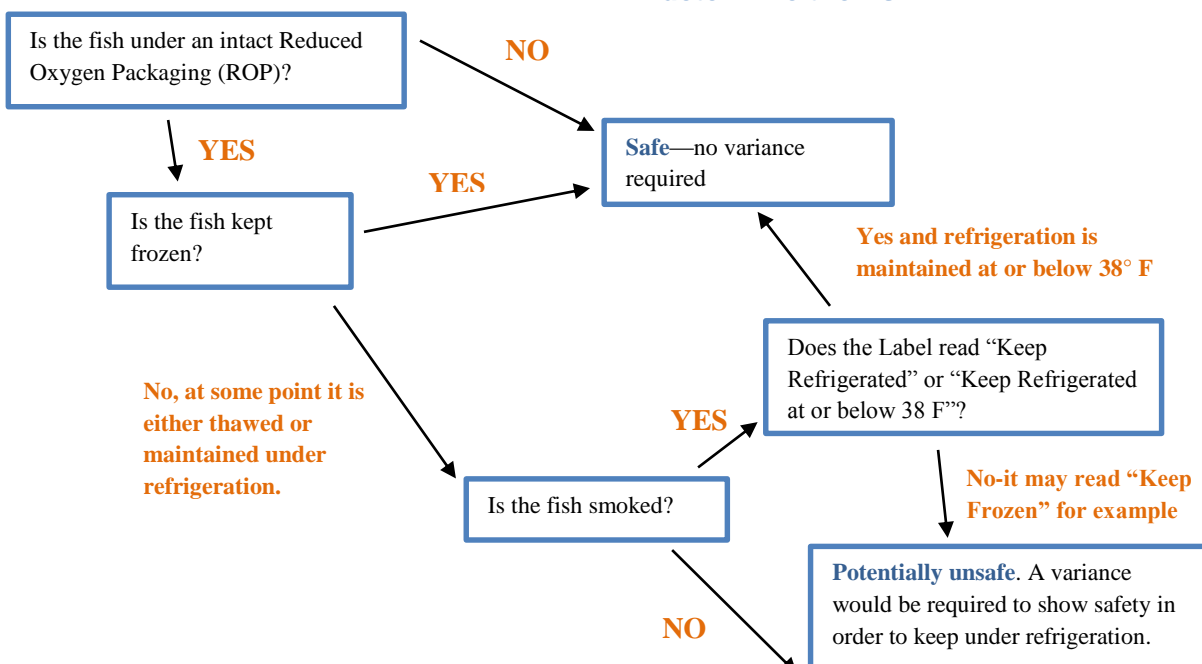
### Why are we concerned?

Fish and seafood are known sources of *Clostridium botulinum* type E which grow at temperatures down to 38° F. In addition to being able to reproduce at low temperatures, *Clostridium botulinum* is a spore former. The spores wait for an atmosphere without

oxygen, which is created under ROP. Without proper controls or other hurdles (e.g. nitrite, salt concentration or low water acidity), these spores will grow and produce a toxin. When the toxin is eaten it can cause a potentially fatal paralytic illness known as Botulism.

The way a fish processor labels their product may relate to how they ensure safety of their product to control *Clostridium botulinum* and other hazards such as toxin production. ROP fish should be stored under conditions the label states either frozen or at or below 38° F. Another option for safety under normal refrigeration is to remove the fish from the ROP packaging or slit a hole in the packaging creating an aerobic atmosphere.

Use the flow chart below to help determine the risk



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